

**CLAIMS**

1. An arrangement including:

- a variable optical attenuator (500) including a polarisation rotation medium (504), and
- an optical isolator (102) including an optical rotator (208),

characterised in that it includes a polariser (506) interposed between said polarisation rotation medium (504) and said optical rotator (208), whereby said polariser (506) is common to both said variable optical attenuator (500) and said optical isolator (102), said arrangement comprising an integrated variable optical attenuator and isolator assembly.

2. The arrangement of claim 1, characterised in that it includes an additional polariser (604) associated with said polarisation rotation medium (504) in said variable optical attenuator (500), whereby said polarisation rotation medium (504) is sandwiched between said additional polariser (604) and said polariser (506) common to said variable optical attenuator (500) and said optical isolator (102).

3. The arrangement of either of claims 1 and 2, characterised in that said optical rotator is a Faraday rotator (208).

4. The arrangement of claim 3, characterised in that said optical rotator (208) has associated a magnet (200) with an opening for locating said Faraday rotator (208).

5. The arrangement of either of claims 3 or 4, characterised in that said Faraday rotator (208) is a garnet material.

6. The arrangement of any of the previous claims, characterised in that said polarisation rotation medium (504) includes a liquid crystal cell (316).

7. The arrangement of any of the previous claims 1 to 5, characterised in that said polarisation rotation medium (504) includes a Faraday rotator material (406) and a solenoid (410) for generating a magnetic field through said Faraday rotator material (406).

8. A component for the arrangement of any of claims 1 to 7, characterised in that it includes said polarisation rotation medium (504) and said common polariser (506) connected in optical alignment.

9. A component for the arrangement of any of claims 1 to 7, characterised in that it includes said optical rotator (208) having connected therewith an output polariser (210b).

10. A method of assembling the arrangement of any of claims 1 to 7, characterised in that it includes the steps of:

- providing a first component (700) including said polarisation rotation medium (504) and said common polariser (506) connected in optical alignment,
- providing a second component (702) including said optical rotator (208), and
- assembling said first (700) and second (702) components by causing said common polariser (506) to be

interposed between said polarisation rotation medium (504) and said optical rotator (208).